

Teacher's Guide GRADES 6-12 2014



nyc.gov/walkingschools



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Introduction

Thank you for your interest in the 2014 We're Walking Here competition.

It provides students citywide with the opportunity to win cash prizes for their school as they explore and then share some of the many benefits of walking. This learning experience employs multiple modalities and is easily adaptable across all grades and learning styles. The *We're Walking Here* (WWH) curriculum complements the Common Core requiring students to read, listen, write, and speak, closely observing environmental and traffic conditions, and health benefits.

October 7, 2014, final contest submissions due no later than midnight, Monday, November 24, 2014. This competition will require two to three class periods to administer, including one WWH 2014 lesson and the creation of a PSA. At a time of the school year when standardized testing schedules are less demanding, WWH provides teachers with a project that builds class cohesion and advances learning momentum.

In addition to cash prizes offered through the Safe Streets Fund (<u>safestreetsfund.</u> <u>org</u>), we recommend that schools and PTAs complement this with awards and prizes of their own, recognizing individual students and smaller student groups for their creativity, productivity and school pride.





Participate in Three Easy Steps

STEP I: GET WALKING

- Students track their walking activity over a two-week period using their individual "Blocks You Walked Student Tracker," marking the number of blocks walked daily, weekly, and finally, the bi-weekly grand total. At the end of each week, teachers will compile all individual student results on the "Blocks You Walked Classroom Bar Graph."
- Review instructions on how to incorporate pedometers into student walking and class lessons, see following page.
- Submit a copy of the bar graph to WWH 2014, either by emailing a scan of the 8 1/2 " X 11" graph, by faxing to (212) 839-4782, or by taking a digital photo of the postersized graph and emailing as attachment to walkingschools@dot.nyc.gov.

STEP II: GET TALKING

- Lessons, worksheets, and other resources are included in your WWH Starter Kit. The materials will encourage students to explore the benefits of walking, including environmental impacts, personal health improvements and the importance of walking safely. Share the NYC Walking Facts sheet with your students to lay the groundwork. Teachers then choose a lesson aligned with the level and learning styles of their student group.
- Students complete the "Public Service Announcement Planning" sheet. Teachers help students brainstorm ideas and select the strongest, most creative elements to incorporate into their PSA message.

Competition Notes

- The first two WWH 2014 registered classes (maximum 60 students per school) per school will receive starter kits including lesson plans, a set of student worksheets, trackers, pencils, and pedometers for all students in the class.
- Although our supplies are limited to 2 classes/60 student per school, additional classes per school are invited to join the PSA competition. See competition rules.

STEP III: GET THE MESSAGE OUT

 Submit the final typed PSA script of no more than 75-100 words via email – <u>walkingschools@dot.nyc.gov</u>, no later than **November 24, 2014, at midnight**. In addition to the PSA script, we strongly encourage audio or audio-visual recordings of students' PSA, send digitally or via USPS (address below). We will accept submissions from multiple classes in each school.

SUBMISSION MAILING ADDRESS

NYC Department of Transportation Office of Safety Education and Outreach Attn: We're Walking Here 2014 59 Maiden Lane, 34th floor New York, NY 10038

SUBMISSION EMAIL

walkingschools@dot.nyc.gov





Using a Pedometer

Your WWH 2014 enhanced WWH Starter Kit includes one pedometer per student, up to 60 per school, to enrich student quantitative understanding of distance, time and rate. Pedometers challenge students to walk healthy distances every day. They are often experienced as fun motivational gadgets by children and adults alike, and add a novel dimension to any walking contest. Here are a few tips about how to use them.

- WWH pedometers measure steps, so students will either need to calculate how long their unique step is, or teachers can assign pre-set averages, e.g., elementary school student, 15 inches/step, middle school student, 18 inches/step, high school student, 20 inches/step.
- (2) Pedometer measurements are most accurate with smooth, steady steps. Jumping, hopping and running will throw off the counting mechanism.
- (3) Assign pedometers to measure in- and around-school activity over the course of one school day, or for a 24-hour period to include to- and fromschool activity. Remind students sharing pedometers to note the numeric readings before resetting the instrument for the next user.
- (4) Teachers can create simple or elaborate assignments for students to convert inches to blocks walked depending on the age, interest and academic levels of their students. See the "How Many Steps?" lesson included in the WWH Teacher's Guide.

For additional pedometer activities to enhance cross-curricular lesson plans, visit Virginia's Walk Smart website: <u>http://www.doe.virginia.gov/</u> instruction/physed/walk smart/pedometer activities lessonplans.pdf







Step I: Get Walking

Blocks You Walked

Distribute the "Blocks You Walked Student Trackers" and explain that students will track the blocks they walk on a daily basis. Let students know that the teacher and class will tally all the blocks the whole class walked at the end of week one and week two, building up to the Final Tally required to qualify to win prizes in the competition. (NOTE: You will most likely want to do this during a class session you have devoted to one of the lessons listed in the "Get Talking" step – this is a great way to culminate your lesson and give a solid reason for the activity)

Although the tracker is designed to run from Monday to Friday, please feel free to start on any day of the week and circle back to the Monday when appropriate.

During the "Get Walking" step, ask students to bring their "Blocks You Walked Student Trackers" daily and ask them to share the results when convenient. Teachers and students complete the first week of the "Blocks You Walked Classroom Bar Graph," utilizing either small groups or whole class input. This offers an opportunity to discuss students' accomplishment in order to motivate them on to the second week of walking. Please note, this is also a good idea in case students misplace their trackers after the first week.

THE FINAL TALLY

Send in FINAL BLOCKS WALKED BAR GRAPH with result of your class's two weeks walking activity, either by emailing a scan or photo of the Blocks You Walked Bar Graph to walkingschools@ dot.nyc.gov., or by faxing the 8 ½ X 11 inch copy to (212) 839-4782.

Handouts

- (1) Blocks You Walked Student Tracker (included in the Starter Kit)
- (2) Blocks You Walked Classroom Bar Graph Poster for use as a class (included in the Starter Kit)



Download printable versions of the Student Tracker and Classroom Graph at <u>nyc.gov/walkingschools.</u>

A Note About Blocks

For the purposes of WWH, blocks are short, north-south NYC blocks (264 feet). However, this can vary per borough and students should simply count a block everytime they cross a street.





Step II: Get Talking

Review the New York City Walking Facts sheet with your students. Choose an activity or activities to do with your students that you feel will best launch them into the "Get Walking" step of the competition. The activity you choose will also inform the Public Service Announcement you create during the "Get the Message Out" step.

Description of Activities

Neighborhood Walk

Categories: Safety Subjects: Social Studies, Science Time: 30-45 minutes Handout: (2) Neighborhood Walk

Lead the students in a discussion about the area around their school and the way the streets are designed. You can use the "Neighborhood Walk" handout that we've included. Distribute copies to each student. Take a walk with your students on the block directly around the school or a few blocks that are close by. Have the students use the handout to write down observations for each category, determining what kinds of behaviors you see that are dangerous. When you return from your walk, discuss how these observations and notes can inform your class contest entry. Were you surprised by what you saw? Why is it especially dangerous when drivers don't pay attention? If a lot of kids walk to your school, but the traffic seems to be going too fast, what behavior changes should be made to encourage walking in the area? If people are making dangerous turns at an intersection, what could your students teach drivers to make them safer?



- (1) NYC Walking Facts
- (2) Neighborhood Walk
- (3) School Zone Behaviors
- (4) The Carbon Footprint of a Commute
- (5) How Many Steps?
- (6) Street Survey
- (7) Crash Stat

School Zone Behaviors

Categories: Safety Subjects: Social Studies Time: 20-30 minutes Handout: (3) School Zone Behaviors

Distribute the "School Zone Behaviors" handout. Have students work with partners to list examples of ways they have seen drivers, pedestrians, and cyclists being unsafe. Come back together for a class discussion. Be sure to highlight the different ways in which dangerous car driving behaviors (distraction, fast turns, speeding) can have serious consequences for both pedestrians and cyclists. Have a discussion about why it is important for the streets to be safe for pedestrians given the percentage of walkers and their vulnerability. If they believe that people are generally driving dangerously in the area, encourage them to think about what particular changes need to be made to solve this problem. Do we need better education, engineering





or enforcement? Do we need all three? If so, how would we go about doing any of these things? And in the meantime, what could we do to protect ourselves?

* Note: This is an indoor version of the Neighborhood Walk for those who cannot get outside to survey the actual environment.

Personal Carbon Footprint

Categories: Environment Subjects: Environmental Science, Social Studies Time: 20-30 minutes Handout: (4) The Carbon Footprint of a Commute

Ask the class to define the term "carbon footprint." If you want to give them an official definition, it's a "measure of the impact human activities have on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide." In other words, your personal carbon footprint is how much pollution you put in the air from your behavior in a day. For the purposes of this lesson, we will concentrate only on the carbon footprint of a commute to and from school. Use "The Carbon Footprint of a Commute" handout to go over the different amounts of pollution produced by the different modes of transportation. Why is walking so great for the environment?

How Many Steps?

Categories: Health, Safety Subjects: Math, Health, P.E. Time: 45 minutes Handout: (5) How Many Steps? (1) NYC Walking Facts Equipment: Can be used with a pedometer

Take a look at the "How Many Steps" handout. Estimate how many steps it will take to go for a walk around your school. Then go for a walk around the school while counting steps, either with or without the use of a pedometer. Use math to estimate how many steps students take in a day, in a week, and for older students, extend the periods of time and length of distances. Extend the calculations to measuring walking activity over the course of a school day and/or 24 hour period. Students familiar with multiplication and division operations may complete the steps-to-blocks box. Go back to the "NYC Walking Facts" handout to review the health benefits of walking.

As an added feature, have students keep track of the number of minutes it takes them to walk the various distances. Review the Center for Disease Control recommendation that children and teens should do 60 minutes of physical activity every day, especially aerobic activities like walking -<u>http://www.cdc.gov/physicalactivity</u>. Explore other types of weekly activity the CDC recommends as critical to overall fitness and health, i.e., muscle strengthening and bone strengthening.





Street Survey Project

Categories: Health, Safety Subjects: Social Studies, Math Time: 45 minutes Handout: (6) Street Survey

Pass out the "Street Survey" sheet. Ask the students to think through the answers to the seven questions in the survey and fill out their answers as honestly as possible. Have a discussion about their answers. If there's time, calculate some percentages in table groups and have them make pie charts.

Crashstat.org

Categories: Safety Subjects: Social Studies Time: 45 minutes Handout: (7) Crashstat.org

Distribute the "Crashstat.org" handout. Have students work with partners at a computer. Look at the mapped crash statistics for the area around the school and fill out the worksheet. Come back together for a class discussion. Why is it important for the streets to be safe for pedestrians? What percentage of people getting around are pedestrians? Which pedestrians are most vulnerable? If the students believe that people are generally driving dangerously in the area, encourage them to think about what particular changes need to be made to mitigate this problem. Do we need better education, engineering, or enforcement? Do we need all three? If so, how would we go about doing any of these things? And in the meantime, what could we do to protect ourselves?







(1) NYC Walking Facts



Health

- On average, people who walk or bike to work or school get more than an hour of exercise daily. They also lower their risk of heart disease and diabetes.
- People that live in areas with more high quality sidewalks and bike lanes are more likely to be active and less likely to be overweight.
- New Yorkers who take public transportation for most of their commute get almost half an hour more daily physical activity than those who use a personal car.
- The highest concentrations of particulate matter are found in areas where traffic density is highest. If fewer cars are on the roads, air quality will improve.
- The health benefits of regular physical activity, even in polluted air, outweigh the risks of inactivity.



- Pedestrians are much more vulnerable than car occupants in a crash.
- Driver inattention was cited in at least 1 in 3 crashes resulting in pedestrians seriously injured.
- When it comes to traffic danger, people between ages 5 and 17 and over age 60 are the most at-risk pedestrian groups.
- Children involved in a crash while crossing against the signal are more likely to be seriously injured than an adult struck while crossing against the signal.
- In New York City 3 in 4 serious pedestrian crashes occur at intersections.
- Two-fifths of serious pedestrian crashes occur between 3pm and 9pm.
- Transit riders are 95% safer than people driving in cars.







(1) NYC Walking Facts (continued)



Going Green

- New York is considered one of the greenest cities in the country because so many people use walking, cycling, the subway, and buses to get around town.
- Getting to work, only 23% of New Yorkers drive; the rest take public transit, walk, or bike.
- One in every four transit trips in the US is made in New York.

- Transportation is the largest single source of air pollution in the United States.
- Walking produces NO pollution
- New York's mass transit system moves approximately 40% of all people traveling by motorized transportation on a typical weekday (excluding heavy trucks), while resulting in only 12% of transportation CO₂ emissions, and 3% of overall CO₂ emissions.
- Without efforts to limit carbon emissions, the United States could warm 7 to 11 degrees Fahrenheit by the end of the century. Cutting emissions could hold that increase to just 4 to 6.5 degrees Fahrenheit.



Class:



Name:

School:

Date:

(2) Neighborhood Walk

Walk around your neighborhood with your team for twenty minutes. Look at the behaviors of pedestrians, cyclists, and drivers, and note how many people you see doing each one of the dangerous behaviors. What should they be doing differently?





Class:

Name:

Date:

(3) The Carbon Footprint of a Commute

Let's say Maria lives in one borough and goes to school in another borough 5 miles away. That means her total commute to school is 10 miles per day.

If she:

rode in an SUV, her 10-mile commute would generate 16 pounds of carbon dioxide.

rode in an average car, her drive would release 12 pounds of carbon dioxide.

rode in a hybrid car, this commute would emit 4 pounds of carbon dioxide each day.

took the bus, she would create 5 pounds of carbon dioxide.

rode the train or subway she would put 2.5 pounds of carbon dioxide into the atmosphere.

walked, biked, or skated, Maria's commute would create no carbon dioxide beyond her normal respiratory output.





(3) The Carbon Footprint of a Commute (continued)



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Are there any easy changes you could make to the way you get to school to lower your personal carbon footprint? Could you walk more often?





Class:

Name:

Date:

(4) School Zone Behaviors

Brainstorm with a partner and list the different unsafe behaviors you see car drivers, cyclists, and pedestrians do around your school every day.

	CYCLISTS:
DRIVERS:	
	What could they do differently?
What could they do differently?	PEDESTRIANS:
	What could they do differently?







Name:

Date:

& Outreach





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Class:

Name:

Date:

(6) Street Survey

1	Have yo	ou ever been hit by a car?	6	Which one do you think the streets
	Yes	Νο		apply.
2	Do you been hit	know someone who has to by a car?		cars
	Yes	Νο		trucks
3	Have yo	ou ever had a near-miss or		buses
	another a car?	dangerous interaction with		bikes
	Yes	Νο		pedestrians
	100			other
4	Do you travel to	think it's easy for you to and from school?	7	If there is a crash and a pedestrian is hit by a car, who is most likely at
	Yes	No		fault?
5	How do to and f	you usually get rom school?		the driver of the car
				the pedestrian
	car			the designer of the street
	public t	ransit (bus or subway)		
	school	bus		
	bike			
	walking	I		
	other			





Class:

Name:

Date:



Go to: www.crashstat.org

Click on your school's borough at the top. Zoom in so you can clearly see the neighborhood around your school.

1

Has there been a crash in the area? Which intersection? What might be some reasons why this intersection is a dangerous place for pedestrians?





Notice this data only goes to 2005. Do you think this intersection has gotten safer since then? Why or why not?



Is the area near your school generally safe or unsafe for walking? Why or why not?

ABOUT CRASHSTAT 2.0

Crashstat.org organizes data that is available to the public and shows the fatal crashes as a layer on the map of New York City. It is powered by Transportation Alternatives.







Step III: Get the Message Out

Discuss what a Public Service Announcement is with your students. Can they think of any PSAs they have heard? Have they noticed any behavior changes or public opinion shifts caused by PSAs? Use this as a jumping-off point to locate some common ideas before your students complete the WWH PSA Planning worksheet, individually or in small groups.

Teachers then may work as a whole class to select the strongest, most creative elements and themes to incorporate into the class PSA.

Submit the final typed PSA script of no more than 75-100 words via email to walkingschools@dot.nyc. gov, no later than no later that midnight, Monday, November 24, 2014.

In addition to the required PSA script, teachers may optionally submit audio and/or Audio-visual recordings (address below). We will accept submissions from multiple classes in each school.

Please review full Competition Rules (on the next page) to ensure you are in compliance with the guidelines.

Handouts

(1) PSA Planning





WWH 2014 Competition Rules **ENTRIES MUST INCLUDE:** FINAL BLOCKS WALKED BAR GRAPH with result of your class's two weeks walking activity, sent either by emailing a scan or photo of the Blocks You Walked Bar Graph to walkingschools@dot.nyc.gov., or by faxing the 8 1/2 X 11 inch copy to (212) 839-4782. Public Service Announcement (PSA) as a typed script which reads 30 seconds in length (no more than 75-100 words). Please label the script with your school name, class number and teacher's name along with the script. Teachers are invited to submit audio and/or video recordings to complement the typed script. Although our supplies are limited to 2 classes/60 student per school, additional classes per school are invited to join the PSA competition. THE PSA WILL BE JUDGED ON THE FOLLOWING CRITERIA: ORIGINALITY: PSA shows imagination and creativity in promoting the benefits of walking. • APPEAL: PSA is catchy and has audio-visual appeal. CONCEPT: PSA thoughtfully highlights the benefits and importance of walking. PERSUASIVENESS: PSA is convincing and will make school-aged children and teenage youth change their behaviors and walk more. PRIZES A grand prize will be awarded to the school with the overall best entry (\$1,000). A 2nd place prize (\$750) and 3rd place prize (\$50) will be awarded as well. All submissions are

December, 2014. The winning PSA's will be professionally video-recorded and played for the general public. These could include, but are not limited to radio or television broadcast, announcements

due no later than midnight, Monday, November 24, 2014. Winners will be announced in

made by the City of New York, and distribution via DOE, DOT, and DOHMH YouTube outlets.





6-12 WORKSHEET